AND O S TRABELLE



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Robert J. Monson and Allen L. Arndt

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Examiner:

Wujciak

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For:

USER COUPLED WORKSPACE SHOCK ISOLATION SYSTEM

Carl L. Johnson.

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8-5-04

Date

Honorable Commissioner for Patents Alexandria, VA 22313-1450 RECEIVED AUG 1 2 2004

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES **GROUP 3600**

APPLICANT'S APPEAL BRIEF

Sir:

I. REAL PARTY IN INTEREST

The real party in interest is Lockheed Martin, assignee of U.S. patent application serial number 09/490,680; filed on January 24, 2000; titled USER COUPLED WORKSPACE SHOCK ISOLATION SYSTEM.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to the above-identified patent application.

III. STATUS OF CLAIMS

Claims 8-17 to a shock isolation system are pending in the above-identified application.

Claims 8-10 and 15-17 have been rejected. Claims 11-14 have been objected.

IV. STATUS OF AMENDMENTS TWICE REJECTED

The application was twice rejected on July 29, 2003. In response to the second rejection of July 29, 2003, a Notice of Appeal was filed on October 20, 2003.

V. SUMMARY OF INVENTION

The present invention comprises a shock-isolation system including an isolatable platform having an operator station and a console, which are secured to the platform in a non-displacement mode. The platform of the present invention is supported in a displaceable mode through a shock mount that shockingly isolates the platform to thereby simultaneously isolate the operator, the operator station and the console as a unitary system and to further shockingly isolate the operator, the operator station and the console from each other to thereby minimize injury to the operator due to an external high "g" impact to the support for the shock-isolation system.

VI. ISSUES

- 1. Whether the reference of Gyllner teaches a first mounting member for rigidly securing a console to a unitary platform?
- 2. Whether the reference of Gyllner teaches a shock mount located between a support structure and a unitary platform for supporting the unitary platform in a condition wherein the sole support for the unitary platform is the shock mount?
 - a. Whether the reference of Gyllner teaches a shock mount located between a support structure and a unitary platform?
 - b. Whether the reference of Gyllner teaches a shock mount for supporting a unitary platform in a condition wherein the sole support for the unitary platform is the shock mount?
 - 3. Whether the combination of the references of Gyllner and Brown et al. make obvious an operator unitary platform, which include a foot deck for an operator?

VII. GROUPING OF CLAIMS

Independent claim 8 stands alone on its own. Claim 15 and 17 are grouped with independent claim 8. In regards to claims 9-12, 14, and 16, while claims 9-12, 14, and 16 each depend on independent claim 8, claims 9-12, 14, and 16 each also stand alone on their own. In regards to claim 13, claim 13 is grouped with claim 11.

VIII. ARGUMENT

In the Office Action dated July 29, 2003, the Examiner rejected independent claim 8 and dependent claims 9 and 15-17 under 35 U.S.C. 102(e) as being anticipated by the reference of Gyllner (U.S. Patent No. 5,964,310) and rejected dependent claim 10 under 35 U.S.C. 103(a) as being unpatentable over the reference of Gyllner in view of the reference of Brown et al. (U.S. Patent No. 4,392,546). In regards to claims 11-14, the Examiner has indicated that claims 11-14 contains allowable subject matter and would be allowable if rewritten in independent form to include all of the limitation of the base claim and any intervening claims. In view of the aforementioned, claims 11-14 thus will not be a part of this Appeal.

1. The reference of Gyllner does not teach a first mounting member for rigidly securing a console to a unitary platform.

Applicant's independent claim 8 calls for "a first mounting member for rigidly securing a console to said unitary platform." On page 2, lines 7-9 of the office action dated July 29, 2003, in rejecting independent claim 8 under 35 U.S.C. 102(e) as being anticipated by the reference of Gyllner (U.S. Patent No. 5,964,310) the Examiner stated:

"Gyllner discloses a shock-isolation system (figure 1) including ..., a first mounting member (34) ..." (Emphasis added.)

The Applicant respectfully disagrees with the Examiner's above statement. A review of the reference of Gyllner reveals that Gyllner discloses a machine having a suspended

operator station 18. (See Figure 1.) Located on one end of Gyllner operator station 18 is a pair of pivot joints 38 (Figure 3) that fixedly maintain and support the first end of Gyllner operator's station 18. The pivot joints 38 provide for pivotal movement about a transverse axis 42 (see Figure 3 and column 3 lines 49-52)."

Located on the other end of the Gyllner operator station 18, and what the Examiner refers to as a mounting member 34 in Gyllner, is a "first end portion" of Gyllner's operator's station 18 (see Figure 3 and column 3, lines 34-38 and lines 44-50). It is submitted that the first end portion 34 of Gyllner's operator's station 18 is different from the Applicant's "first mounting member for rigidly securing a console to said unitary platform" as Gyllner describes his first end portion 34 as being a part of his operator's station 18 (column 3, 34-37). Since Gyllner describes his first end portion 34 as being a part of his operator's station 18, it is further submitted that Gyllner's first end portion 34 cannot function to rigidly secure a console to the floor 32 of Gyllner's operator's station 18.

In view of the above, it is respectfully submitted that the reference of Gyllner does not teach the Applicant's first mounting member for rigidly securing a console to the unitary platform. It is also for the above stated reason alone that the Applicant respectfully submits that Applicant's claim 8 is allowable over the reference of Gyllner.

- 2. The reference of Gyllner does not teach a shock mount located between a support structure and a unitary platform for supporting the unitary platform in a condition wherein the sole support for the unitary platform is the shock mount.
 - a. The reference of Gyllner does not teach a shock mount located between a support structure and a unitary platform.

Applicant's independent claim 8 calls for a "shock mount located between said support structure and said unitary platform." On page 2, lines 7-9 of the Office Action dated July 29, 2003, in rejecting independent claim 8 under 35 U.S.C. 102(e) as being anticipated by the reference of Gyllner (U.S. Patent No. 5,964,310) the Examiner stated:

"Gyllner discloses a shock-isolation system (figure 1) including ..., a shock mount (56). The shock mount is located between the support structure and the unitary platform." (Emphasis added.)

The Applicant respectfully disagrees with the Examiner's above statement. A further review of Gyllner patent reveal that Gyllner discloses a machine having a supporting frame 14 and an operator station 18. Gyllner's operating station 18 includes a floor 32 and a second end portion 36. Referring to Gyllner's Figures 1, 2, and 4, note that Gyllner's second end portion 36 and the floor 32 of his operating station 18 are two different regions on his operator's station 18 as Gyllner's specifically shows his second end portion 36 as being located perpendicular to the floor 32 of his operating station 18.

Referring to Figures 1-4, although Gyllner shows his pair of pivot joints 38 and stops 66 as being located between the floor 32 of Gyllner operator's station 18 and Gyllner's

supporting frame 14, note that Gyllner's linear shock absorbers 56 are not shown as being located between the floor 32 of Gyllner operator's station 18 and Gyllner's supporting frame 14. Instead, Gyllner specifically shows a portion of his linear shock absorbers 56 as being attached to the second end portion 36 of his operating station 18. More specifically, note in column 4, lines 2-4 wherein Gyllner states that the piston and rod assemblies 60 of his linear shock absorber 56 "are shown as being connected to the second end portion 36 of the operator's station ..." (Emphasis added.) As previously noted, the second end portion 36 of Gyllner's operating station 18 and the floor 32 of Gyllner's operating station 18 are two different regions of his operator's station 18 as Gyllner's specifically shows his second end portion 36 located perpendicular to the floor 32 of his operating station 18.

In Atlas Powder Co. v. IRECO Inc., the Federal Circuit held that:

"To anticipate a claim, a prior art reference <u>must disclose every limitation</u> of the claimed invention, either explicitly or inherently." (Emphasis added.)

Applicant submits, in view of *Atlas Powder Co. v. IRECO Inc.*², that the reference of Gyllner does not anticipate Applicant's independent claim 8 as Gyllner does not disclose the limitation of a shock mount "located between the support structure and the unitary platform" but instead shows a portion of Gyllner's linear shock absorbers 56 attached to

¹ See Atlas Powder Co. v. IRECO Inc., 51 USPQ2d 1943, 1945 (Fed. Cir. 1999), citing In re Schreiber, 44 USPQ 1429, 1477 (Fed. Cir. 1997).

² See *Id*.

the second end portion 36 of Gyllner's operating station 18, the second end portion 36 shown located perpendicular to the floor 32 of Gyllner's operating station 18.

b. The reference of Gyllner does not teach a shock mount for supporting a unitary platform in a condition wherein the sole support for the unitary platform is the shock mount.

In further regards to the Examiner's rejection of independent claim 8, a review of Applicant's independent claim 8 points out that the "sole support for the unitary platform is the shock mount." Note however that the support for Gyllner's operator station 18 comprises a collage of four different elements with each of the elements performing a different function. That is, the first elements supporting Gyllner's operator station 18 are his two pivot joints 38 that pivotally support one end of his operator station 18. The second elements supporting Gyllner's operator station 18 are his two coil springs 62 which support the other end of his operator station 18. The third elements supporting Gyllner's operator station 18 are his pair of spaced apart stops 66 which function to limit the pivotal motion of is operator station 18. And the fourth elements supporting Gyllner's operator station 18 are his linear shock absorbers 56, which function to dampen the pivotal motion of his operator station 18.

In view of the aforementioned, it is respectfully submitted that the reference of <u>Gyllner</u> does not teach or show that the sole support of his operator's station 18 is through a shock mount since Gyllner discloses a multitude of different elements, namely his two pivot

joints 38, coil springs 62, spaced apart stops 66, and linear shock absorbers 56 to support his operator station 18.

In further regards to Applicant's claim 8, claim 8 goes on to point out that the operator station is "free to remain spatially fixed". Contrary to the aforementioned, it is noted that Gyllner provides support for the second end of his operator station 18 through the use of two coil springs 62, which suspend the second end of his operate station. (Column 4 lines 11-12). Gyllner also includes linear shock absorbers 56 to dampen the movement of his operator station 18. Thus, the Gyllner operator station 18 is restrained from translational motion by pivot joints 38. Because the pivot joints 38 restraint the Gyllner station from translational motion, it is submitted that the Gyllner operator station 18 is not free to "remain spatially fixed to isolate the unitary platform from the effects of high "g" shock" as pointed out in claim 8. That is, if one end of Gyllner's operator station 18 is secured by Gyllner's pivot joints 18 to his supporting frame 14, Gyllner's operator station 18 cannot remain spatially fixed but must follow the motion of his supporting frame 14.

In view of the above, it is respectfully submitted that the reference of Gyllner does not teach a shock mount located between the support structure and the unitary platform. It is also for the above stated reasons that the Applicant respectfully further submits that Applicant's claim 8 is allowable over the reference of Gyllner.

3. The combination of references of Gyllner and Brown et al. does not make obvious an operator unitary platform which includes a foot deck for an operator.

Applicant's dependent claim 10 calls for a "shock-isolation system of claim 9 wherein the operator unitary platform includes a foot deck for an operator." (Emphasis added.) On page 2, lines 18-19 and page 3, lines 1-3 of the Office Action dated July 29, 2003, in rejecting Applicant's independent claim 10 under 35 U.S.C. 103(a) as being unpatentable over the reference of Gyllner in view of the reference of Brown et al. (U.S. Patent No. 4,392,546) the Examiner stated:

"Gyllner teaches the unitary platform but fails to teach the platform comprises a foot deck for an operator. Brown et al. teaches the unitary platform (40) comprising a foot deck (56). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added foot deck to Gyllner's platform as taught by Brown et al. to provide a foot rest for the operator while operating the machine." (Emphasis added.)

The Applicant respectfully disagrees with the Examiner's above statement. It is submitted that the Brown patent does not teach a foot deck for an operator. Instead, the foot deck (56) referred to by the Examiner is actually an "inclined portion" of Brown's subfloor 40. (Emphasis added, see Figure 1.) It is submitted that the "inclined portion 56" of Brown is not a foot deck but an angled wall of his device.

Note that what Brown does discloses for a user's feet are "foot pedals 96" (see Figure 4) for use by an operator who sits on seat 102. Unlike the Applicant's foot deck, which can support a standing operator (see page 6, line 2 of the Applicant's disclosure), the "steering

column assembly 62" of Brown is configured so that a person cannot stand upright but must sit on the seat 102 (see Figure 3 where the steering wheel extends up to the seat).

Further note that Brown's angled wall/incline portion 56 is also configured so as to prevent the operator from standing upright thereon due to the inclined/slanted nature the angled wall/incline portion 56.

It is further submitted that the Brown angled wall or inclined portion 56 is not a foot deck and that Brown's subfloor 40 is also not a foot deck since the configuration of his operator station suggests that his subfloor 40 is a connecting link for his "steering column assembly 62" (See Figure 1-4) rather than a foot deck for an operator to stand on.

In further regard to the Examiner's rejection of dependent claim 10 on the combination of the references of Gyllner and Brown, it is noted that claim 10 depends on Applicant's independent claim 8. Since the reference of Gyllner fails to disclose the elements of Applicant's independent claim 8 for the reasons given above, it is submitted that the combination of the references of Gyllner and Brown does not make Applicant' dependent claim 8 obvious.

In regards to claims 9 and 16, applicant's dependent claim 9 calls for the shock-isolation system of claim 8 "including a second mounting member for securing the operator station thereto." (Emphasis added.) It is submitted that the reference of Gyllner does not teach a first mounting member and "a second mounting member for securing the operator station thereto." Note that the Examiner erred in referring to Gyllner's reference numeral 34

as being "a first mounting member" and Gyllner's reference numeral 38 as being "a second mounting member" (page 2, lines 8-10 of the Office Action) as Gyllner specifically state that his reference numeral 34 identifies "the first end portion of the operator's station 18" (column 3, lines 44-45) and that his reference numeral 38 identifies "A pair of pivotal joints." (See column 3, lines 34-35.)

Applicant's claim 16 calls for the shock-isolation system of claim 8 "wherein the shock mount simultaneously isolates the operator station and the unitary platform from shock and vibration." It is submitted that the reference of Gyllner and Brown both do not teach a shock mount that "simultaneously isolates the operator station and the unitary platform from shock and vibration." (Emphasis added.)

In further regards to dependent claims 9-10 and 15-17, claims 9-10 and 15-17 each depend on independent claim 8. Since independent claim 8 is allowable for the reasons given above, it is respectfully submitted that dependent claims 9-10 and 15-17 should also allowable.

It is for the above reasons that the applicant respectfully submits that claims 8-10 and 15-17 are allowable over the prior art references of Gyllner and Brown et al. In view of the above, it is submitted that the application is in condition for allowance. Allowance of claims 8-10 and 15-17 is respectfully requested.

In summary, it is submitted that the Examiner has erred in rejecting Applicant's claims 8-9 and 15-17 under 35 U.S.C. 102(e) as being anticipated by the reference of Gyllner and

Applicant's claim 10 under 35 U.S.C. 103(a) as being unpatentable over the combination of the reference of Gyllner in view of the reference of Brown et al. Accordingly, it is respectfully requested that the decision of the Examiner be reversed and that applicant's claims 8-10 and 15-17 be allowed.

Respectfully submitted,

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CLJ/cj Enclosures

IX. APPENDIX

Pending Claims:

- 8. (Previously Amended) A shock-isolation system for isolation of shocks comprising:
 - a support structure;
 - a unitary platform, said unitary platform having an operator station thereon;
 - a first mounting member for rigidly securing a console to said unitary platform;
- a shock mount, said shock mount located between said support structure and said unitary platform, said shock mount for supporting said unitary platform in a condition where the sole support for the unitary platform is the shock mount so that the unitary platform is free to remain spatially fixed to isolate the unitary platform from the effects of high "g" shocks with the operator station and the unitary platform further inhibiting opportunity for operator injury by simultaneously preventing the operator station and the unitary platform from moving relative to one another.
 - 9. (Previously amended) The shock-isolation system of claim 8 including a second mounting member for securing the operator station thereto.
 - 10. (Previously amended) The shock-isolation system of claim 9 wherein the operator unitary platform includes a foot deck for an operator.
 - 11. (Original) The shock-isolation system of claim 10 wherein the shock-isolation system is only supported by said shock mount.

- 12. (Previously amended) The shock-isolation system of claim 11 wherein the unitary platform includes an upright wall with said upright wall including the first mounting member.
- 13. (Original) The shock-isolation system of claim 12 wherein the unitary platform is metal.
- 14. (Original) The shock-isolation system of claim 13 wherein the unitary platform has a surface area of about 20 to 30 square feet.
- 15. (Original) The shock-isolation system of claim 8 wherein the shock mount provides vibration damping.
- 16. (Original) The shock-isolation system of claim 8 wherein the shock mount simultaneously isolates the operator station and the unitary platform from shock and vibration.
- 17. (Original) The shock-isolation system of claim 8 wherein the shock mount dampens vibration and shock to minimize the relative motion between the operator station and the operator.